

REMARKS / ARGUMENTS

The present application includes pending claims 1-34, all of which have been rejected. Claims 13, 14, and 16 – 20 have been amended. ***New claims 35 – 48 have been added.*** The Applicant respectfully submits that the claims define patentable subject matter.

Claim 31 stands rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent Publication No. 2003/0007644, by Sprunk et al. (hereinafter, "Sprunk"). Claims 1, 2, 6, 10-12, 16, 20-22, 26, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 7,293,292 issued to Testardi et al. (hereinafter "Testardi"), in view of Sprunk.

Without conceding that Sprunk qualifies as prior art under 35 U.S.C. § 102(e), the Applicant respectfully traverses these objections and rejections at least for the reasons previously set forth during prosecution and at least based on the following remarks.

REJECTION UNDER 35 U.S.C. § 102

I. Sprunk et al. Does Not Anticipate Claim 31

The Applicant first turns to the rejection of claim 31 under 35 U.S.C. 102(e) as being anticipated by Sprunk et al.. With regard to the anticipation rejections

under 102(e), MPEP 2131 states that “[a] claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” See Manual of Patent Examining Procedure (MPEP) at 2131 (internal citation omitted). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” See *id.* (internal citation omitted).

With regard to the rejection of independent claim 31 under 35 U.S.C. §102(e), the Applicant initially notes that the Office Action does not address the detailed comments provided by the Applicant in response to the Final Office Action mailed on August 20, 2007. Therefore, the Applicant’s arguments are restated below, and the Applicant respectfully requests a detailed response thereto.

The Applicant maintains that Sprunk et al. does not disclose or suggest at least the limitation of “a mapper” as recited by the Applicant in independent claim 31. The Final Office Action refers to Sprunk, paragraph [0036], FIG. 4, Element 420 and 425 for support and states that “the first stage of dual DES Key Generator is considered as a key mapper.” The Applicant points out, however, that there is no suggestion in paragraph [0036] of Sprunk that DES generator 420 is a mapper. Since DES is the abbreviation for ‘Data Encryption Standard’, it is to be assumed that the ‘DES generator 420’ operates in accordance with well-known DES operation principles. DES functionality, however, is not one of mapping input bits.

The Applicant further maintains that Sprunk et al. does not disclose or

suggest at least the limitation of “a scrambler coupled to said mapper” as recited by the Applicant in independent claim 31. The Final Office Action refers to Sprunk, paragraph [0039], FIG. 4, Element 450, 455 and 456 for support and states that “the second stage of dual DES key scrambler (i.e. the key hashing function) can be considered as the scrambling function.” Paragraph [0039] does not teach or suggest that Elements 450, 455 and 460 are a “scrambler coupled to said mapper” as recited by the Applicant. The Applicant points out that the Final Office Action argues above that “said mapper” is provided by the elements 420 and 425 of FIG. 4 in Sprunk. Hence, assuming *arguendo* that elements 450, 455, and 460 constitute “a scrambler,” as suggested by the Final Office Action, FIG. 4 cannot then support “a scrambler coupled to said mapper” since the connections shown in FIG. 4 of Sprunk do not show that “a scrambler” and “a mapper”, as defined in the Final Office Action, are coupled.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 2, 6, 10-12, 16, 20-22, 26, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Testardi, in view of Sprunk.

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure (“MPEP”) states the following:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to

modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

See MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination," and that "although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a *suggestion or motivation in the reference* to do so'" (citing *In re Mills*, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990)). Moreover, MPEP § 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion..., citing *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ 2d 1161 (Fed. Cir. 1999). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

I. Testardi in view of Sprunk does not anticipate independent claims 1,

11, and 21

The applicant now turns to the rejection of claims 1, 11, and 21 as being unpatentable over Testardi in view of Sprunk.

With regard to independent claim 1, the Applicant submits that Testardi does not disclose "a method for producing a secure key," as claimed in the Office Action. The Office Action refers for support to Testardi, col. 6, lines 29-31: "[T]he vendor or manufacturer will generate an electronic key correlated to the unique serial number of stored in the printer." The applicant respectfully submits that Testardi, col. 6, lines 29-31 does not teach or suggest producing a **secure** key, as cited by the Applicant. Although the Office Action apparently interprets "electronic key" as stated in Testardi as "secure key," Testardi, col. 6, lines 29-31 does not provide any support for "secure key." Hence, the Applicant believes to have overcome the rejection to the Applicant's claim limitation of "producing a secure key," and respectfully requests that claim 1 be made allowable.

The Applicant respectfully submits that Testardi in view of Sprunk does not teach or suggest the Applicant's claim limitation:

generating a first output key based on said at least said first input key, said second input key and said third input key, wherein said first output key is unique and differs from said at least said first input key and said third input key is a key variation comprising a device identity.

The Office Action relies for support on Testardi col. 6, line 29-31, and col. 4, line 60-65, and on Sprunk for the underlined portions of the Applicant's claim.

Testardi, col. 6, line 29-31 (cited above), and col. 4, line 60-65 states:

The electronic key (130) is correlated or based on the printer's serial number (121). For example, the electronic key (130) is preferably generated using a mathematical algorithm using the printer's serial number (121) as an input to the algorithm. This may be performed by the computer system (136).

The Office Action states that “the printer device’s serial number is considered as the third input key.” Initially, the Applicant notes that Testardi does not suggest or teach “generating a first output key based on said **at least** said first input key, said second input key **and** said third input key.” There is no suggestion or teaching in Testardi that an output key may be generated using at least said first input key, said second input key, and said third input key. The Office Action further states “Testardi does not expressly disclose receiving at least a first input key, a second input key besides receiving a third input key to generate the output key.” (Emphasis in Office Action). The Applicant agrees with the Examiner that Testardi does not disclose receiving input keys. In addition, Testardi does not teach or suggest any generating of an output key from multiple input keys.

The Office Action suggests that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teaching of Sprunk within the system of Testardi because:

- a) Testardi teaches a method for generating a security key for a printer device . . . and b) Sprunk teaches an enhanced mechanism for generating a cryptographic key to maintain a high level of security against hostile attackers by using multiple security input key variations . . .

The Applicant respectfully disagrees. The Applicant respectfully asserts that neither Testardi nor Sprunk suggest the combination of points a) and b) as recited in the Office Action. Instead, Office Action relies on an ordinary-person standard to establish obviousness. MPEP §2143.01(IV) states “A statement that modifications of the prior art to meet the claimed invention would have been well within the ordinary skill of the art . . . is not sufficient to establish a prima facie case of obviousness *without some objective reason to combine the teachings of the references.*” (Emphasis added, original emphasis omitted.) “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support

the legal conclusion of obviousness." MPEP §2143.01(IV).

Hence, the Applicant believes to have overcome the rejection to claim 1 for at least the reasons provided above. Because the Office Action does not establish a prima facie conclusion of obviousness, the Applicant respectfully requests that claim 1 be made allowable.

Independent claims 11 and 21 are similar to claim 1 and the above arguments may be applied. Hence, the Applicant respectfully requests that independent claims 11, and 21 are made allowable also.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1, 11, and 21.

II. Rejection of independent claims

Dependent claims 2, 6, 10, 12, 16, 20, 22, 26, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Testardi, in view of Sprunk. The Applicant notes that these claims depend on independent claims 1, 11 and 21. Since the Applicant believes to have overcome the rejection under 35 U.S.C. §103 of independent claims 1, 11, and 21, the Applicant respectfully requests that the dependent claims 2, 6, 10, 12, 16, 20, 22, 26, and 30 are made allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 2, 6, 10, 12, 16, 20, 22, 26, and 30.

THE NEW CLAIMS 35 – 48 DEFINE PATENTABLE SUBJECT MATTER

The newly added claims 35 – 48 are similar in scope to the previously presented and amended claims 21 – 34. Hence, for at least the reasons set forth above in section I, claims 35 – 48 define patentable subject matter and are respectfully requested to be allowed. Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 35 – 48.

CONCLUSION

Based on at least the foregoing, the Applicant believes that all claims 1-34 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and request that the Examiner telephone the undersigned Attorney at (312) 775-8105.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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/Ognyan I. Beremski/

Ognyan I. Beremski, Esq.
Registration No. 51,458
Attorney for Applicant

MCANDREWS, HELD & MALLOY, LTD.
500 WEST MADISON STREET, 34TH FLOOR
CHICAGO, ILLINOIS 60661
(312) 775-8000

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